

Brown Anoles: The New Lizard in Town

Texas A&M AgriLife Extension Service — Galveston County Office



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PHOTO CREDIT: Margaret Canavan

Over the past few years brown anoles (pictured) have displaced our once familiar green anoles.

On a rather warm day last week, I spotted a green anole lizard (*Anolis carolinensis*). This was the first and only occasion of my spotting what once was a familiar sight for many decades. I had been on the lookout for these distinctive lizards all through the year. Whether forecasts indicate the last two days of December will be on the cool side, so I do not expect to encounter any more green anoles this year since they

become inactive during cool weather.

Until a few years ago, most gardeners and many residents have at some point noticed bright lime-colored lizards scurrying along fence tops or basking in the sun on a warm brick wall. These are our native species of anole lizards, called green anoles.

Nowadays, the most likely lizard

to be noticed are brown anoles with a diamond pattern and a ridge on their back. These are brown anoles (*Anolis sagrei*), an invasive species that first entered the United States many decades ago. In the last 30 years, the brown anole population has spread from Florida to Louisiana. Over the past few years brown anoles have displaced our once familiar green anoles.





Brown vs. Green: How They Differ

Brown anoles tend to stay closer to the ground while green anoles are more arboreal (living in trees).

Brown anoles are always gray, light brown, or dark brown, never green. Green Anoles can turn from bright green to dark brown depending on environmental conditions.

Male brown anoles have a bright orange-red dewlap with a cream to yellow border. Male green anoles have a pink dewlap.

Brown and green anoles are about the same size, but green anoles have a larger and longer head.

Brown anoles are an invasive species, not native to the United States. They are natives to Cuba and the Bahamas and first appeared in the U.S. in Florida. In contrast, green anoles are native to the southeastern parts of the United States. Green anoles range as far west as Austin, Texas and as far north as North Carolina (green anoles are also all called Carolina anoles in some regions).

What do They Eat?

Both types of anoles eat the same things: insects, spiders, worms, snails, slugs and other invertebrates. There is plenty of prey so it's improbable that the green

anole's food supply is in jeopardy. However, adult brown anoles will often eat hatchling green anoles, a behavior that may be affecting green anole populations in the United States.

Sensitivity to Cold temperatures

Brown anoles are cold sensitive and can survive only in a limited temperature range. That means the population of brown anoles crashes when a hard freeze occurs, and it takes a long period of time for their numbers to recover.

The green anole, on the other hand, has evolved to better able to withstand lower temperatures, so their populations are not as severely impacted by a freeze. However, it is taking less and less time after a freeze for brown anoles to recover, which means they're already beginning to adapt to our Gulf Coast weather conditions. The mild winters of the past few years likely account for the explosion in the visibility of the brown anoles.

How did Brown Anoles Spread to Texas?

Brown Anoles were most likely introduced to Florida by escapes made by pets and as stowaways on planes and ships in the 1940s. By 1970, the brown anole was well established in urban areas all over Florida.

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Brown anoles were first documented in the Houston area in 1987. The first documentation of brown anoles in Montgomery County occurred in 2015.

One common means of spread is on potted plants sold at nurseries. Brown anoles have also been reported to spread by "hitchhiking" on vehicles. I can personally verify that last report. Last September, after returning to my car in a parking lot which was well-landscaped, I noticed a brown anole was resting on the hood of my car. The scientist in me wanted to find how well the critter could cling to a smooth painted surface. It managed to cling onto the hood until my car reached a speed of 47 mph.

